

Differential Diagnosis of Dengue with Rash

Illness	History	Exam	Tests
Scarlet Fever (Group A beta-hemolytic streptococcus infection)	<ul style="list-style-type: none"> Occurs most commonly in children, 1–10 years, during the nonsummer months Family gives history of abrupt onset of fever, sore throat, headache, malaise, and vomiting, 2–5 days post exposure Skin rash appears in all areas at same time and desquamates and fades after 4–5 days 	<ul style="list-style-type: none"> Fever, circumoral pallor, red swollen (strawberry) tongue, pharyngeal erythema with exudate and palatal petechiae, and tender cervical adenopathy Sandpaper-like generalized erythematous rash with discrete skin-colored papules and linear petechial streaks in skin folds, particularly axillary, inguinal, and antecubital fossa 	<ul style="list-style-type: none"> Rapid strep test (pharyngeal swab): positive Anti-streptolysin O titer: positive
Toxic Shock Syndrome (TSS)	<ul style="list-style-type: none"> Occurs most commonly in children, 5–15 years, during winter and spring If history of exposure to person with cold-like symptoms, patient would have been infected 4–14 days before onset of symptoms. Family gives history of fever, headache, runny nose, and rash Patient might complain of arthralgia 	<ul style="list-style-type: none"> Fever, hypotension, and a diffuse erythematous rash on trunk, palms, and soles of feet, which desquamates 1–2 days after disease onset Patient can have mucous membrane inflammation (redness of eyes, mouth, and throat), and evidence of central nervous system and multi-organ involvement with renal, liver, or respiratory dysfunction 	<ul style="list-style-type: none"> Blood cultures: usually negative in staphylococcal infection (<i>S. aureus</i>); might be positive in streptococcal infection (<i>S. pyogenes</i>) Acute and convalescent antibody serology: positive for <i>S. aureus</i> infection Toxin serology: evidence of exotoxins Serum creatinine: elevated > 2 times upper limit of normal for age Platelet count: < 100,000/mm³ Liver function test: AST, ALT > 2 times upper limit of normal



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